

210 d of 28 1609/21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
2005 15 JUL									
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Set-up ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
378 / 1902				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Page 1

Friday, June 24, 2016 11:49:18 AM

Work Order ID: 148110

148110

Parent Item: D2199-31

D2199-31

Parent Item Name: Strut Details

Start Date: 7/27/2016

Required Date: 8/3/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 15.02.05 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M304TR0.750W.049

Purchased

No

f

193.0791

2.736842

M304TR0 750W 049

FF

JUL 27 2016

304 RD Tube .750 x .049W

Location

Loc Qty

Loc Code

GA002

135325

187.5064052

M132270

0.00001

M133131

0.0007242

M133509

14.210211

M133700

2.794323

M133914

5.98516

M134138

1.1364496

M134212

8.5144235

M134306

16.8053689

M134528

40.5665792

M134604

49.23105

M134824

29.650527

M134993

18.6115788

MAT

5.5727347

M133400

5.5727347

2.736842 13.68421

DQA: _____ Date: _____

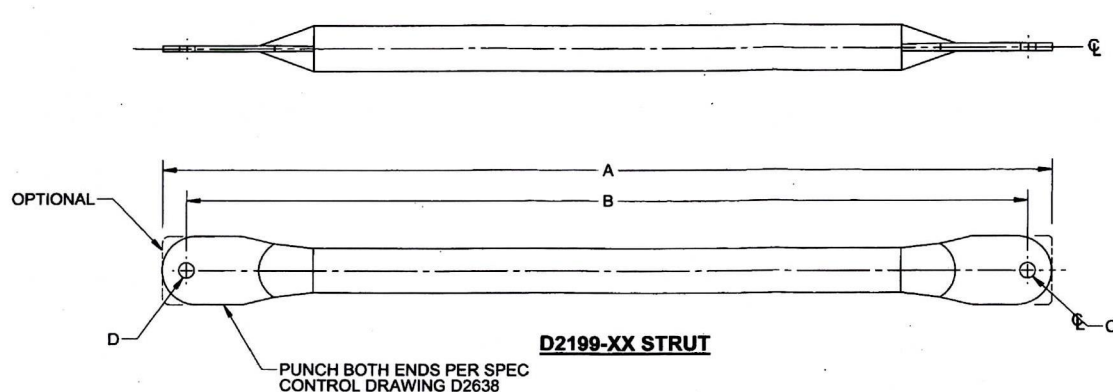


WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																



PART NUMBER	A	B	C	D	WEIGHT (LBS)	FINISH
D2199-1	18.30	17.50	Ø 0.257	Ø 0.257	0.56	NOTE 2
D2199-3	5.80	5.00	Ø 0.257	Ø 0.257	0.17	NOTE 2
D2199-5	22.64	21.84	Ø 0.257	Ø 0.316	0.69	NOTE 2
D2199-7	14.74	13.94	Ø 0.257	Ø 0.257	0.45	NOTE 2
D2199-9	16.52	15.72	Ø 0.257	Ø 0.257	0.50	NOTE 2
D2199-11	23.60	22.80	Ø 0.257	Ø 0.316	0.72	NOTE 2
D2199-13	15.96	15.16	Ø 0.257	Ø 0.257	0.49	NOTE 2
D2199-15	17.57	16.77	Ø 0.257	Ø 0.257	0.54	NOTE 2
D2199-17	28.05	27.25	Ø 0.257	Ø 0.316	0.86	NOTE 2
D2199-19	18.90	18.10	Ø 0.257	Ø 0.257	0.58	NOTE 2
D2199-21	10.80	10.00	Ø 0.257	Ø 0.257	0.33	NOTE 2
D2199-23	26.18	25.38	Ø 0.257	Ø 0.316	0.81	NOTE 2
D2199-25	19.93	19.13	Ø 0.257	Ø 0.257	0.61	NOTE 2
D2199-27	27.34	26.54	Ø 0.257	Ø 0.316	0.84	NOTE 2
D2199-29	21.11	20.31	Ø 0.257	Ø 0.257	0.65	NOTE 2
D2199-31	15.55	14.75	Ø 0.257	Ø 0.257	0.45	NOTE 3

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROUND TUBING Ø 0.750 X 0.049 WALL PER ASTM A213 OR ASME SA213 OR ASTM A269 REF DART SPEC. M304TR0.750W0.049
- 2) FINISH: POWDER COAT "WHITE" (4.3.5.2) PER DART QSI 005 4.3
- 3) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: IDENTIFY WITH DART P/N "D2199-XX" AND B/N BXXXXXX PER QSI 044, 6.5.
- 8) WEIGHT: PER CHART
- 9) MAKE PER TEMPLATE DT2199-XX WHERE XX IS THE RESPECTIVE DASH NUMBER.

RELEASED

2015 FEB 04

ECN 15-522 P15-522

F	INCORPORATED E1. REFORMATTED AND REDRAWN. ADDED -31. ADDED GREY SANDTEX FINISH.	AJS	14.09.26
E	ADDED -23 AND -25 PER TSR A565M. ADDED TEMPLATE & SPEC CTRL. DWG REDRAWN IN CAD	KE	98.04.28
D	ADDED -21	N/A	N/A
C	ADDED -17 AND -19	N/A	N/A
B	ADDED -11, -13 AND -15	N/A	N/A
A	NEW ISSUE	JB	1993
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	AP	DRAWING NO.	REV. A
MFG. APPR.	DD	D2199	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	STRUT DETAILS	NTS
DATE	14.09.26	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

w/o 148110

dm 16/06/24

DART AEROSPACE LTD		Work Order:	148110
Description: STRUT Details		Part Number:	D2199-31
Inspection Dwg: D2199 Rev: F		Page 1 of 1	

INSPECTION SHEET

[illegible]

Measured by:	FF	Checked by:	30 9-89	QC Inspector:	
Date:	JUL 27 2016	Date:	JUL 27 2016	Date:	

Engineering Approval: (If necessary)		Date:
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Rev	Date	Change	Revised by	Approved
B	14.07.31	New Issue	KJ	